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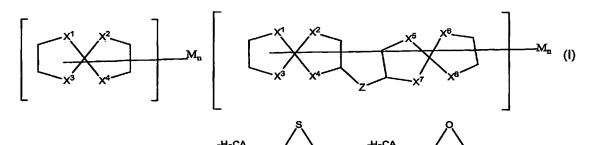
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**(II)** 

(54) Title: SPIROTETRATHIOCARBAMATES AND SPIROOXOTHIOCARBAMATES



2004/056879 A2 (57) Abstract: Spirotetrathiocarbamates (STOCs) or oxa substituted compounds (SOTOCs) of Formula I: Formula (I) or bisSTOC or bisSOTOC compounds of Formula II: Formula (II) wherein X1, X2, X3, X4, X5, X6, X7, and X8, are independently O or S; and preferably at least two and up to all four of  $X^1$ ,  $X^2$ ,  $X^3$  and  $X^4$ , and at least two and up to all four of  $X^5$ ,  $X^6$ ,  $X^7$ , and  $X^8$  are sulfur; Z is  $-C_mR^2_{2m}$ wherein m = 1 to 4;  $-C(R^2)_2SC(R^2)_2$ ,  $C(R^2)_2SSC(R^2)_2$ , or  $-C(R^2)_2OC(R^2)_2$ , n is from 0 to 4; M is selected from  $CH_2C1$ ,  $CH_2SC(O)R^1$ ,  $CH_{2}SC(S)R^{1}, CH_{2}S(CH_{2}CH_{2}S)qH \ wherein \ q \ is \ 0, \ 1 \ or \ 2; \ -CR^{2}\!\!=\!\!CH_{2}, \ -CH_{2}OC(O)CR^{2}\!\!=\!\!CH_{2}, \ CH_{2}N\!\!=\!\!C\!\!=\!\!S, \ CH_{2}N\!\!=\!\!C\!\!=\!\!O, \ CH_{2}NR^{2}H, \ CH_{2}N$ CH2OH, CH2SCH2CH2CR2=CH2, phenyl, C(R2) phenyl, furan, thiophene, halogen, C3-C6 cycloalkyl, C3-C6 heretocyclics, thiol, H, (III) or (IV) wherein A is S, O or phenyl; x is 0 or l; R1 is C1-C22 alkyl; and R2 is H or C1-C22 alkyl have excellent optical properties. Methods for preparing these compositions and optical lenses prepared from the compounds are also provided.

